Amendments to the Specification:

Please replace the title with the following amended title:

SYSTEM AND METHOD FOR ~~THE DISCOVERY AND USE OF DAEDALUS DATA REFERENCE REPRESENTATIONS~~ ANALYZING DATA ACCESSES OF A TRACE FROM A COMPUTER-EXECUTABLE PROGRAM TO DETERMINE DATA ACCESS PATTERNS

Please replace the paragraph starting on line 22 of page 6 as follows:

In another embodiment, instrumentation tool 245 instruments program 240 during compilation. Instrumentation tool 245 may be included in a compiler compiling program 240. At appropriate points, the compiler calls instrumentation tool 245 to insert instrumenting code into the binary executable that the compiler is creating from program 240. Alternatively, instrumentation tool 245 may be a separate program called by the compiler as the compiler compiles program 240. In light of this disclosure, those skilled in the art will recognize that instrumentation tool 245 could be used with a compiler in many different ways to instrument program 240 during compilation without departing from the spirit or scope of this invention.

Please replace the paragraph starting on line 1 of page 7 as follows:

In yet another embodiment, instrumentation tool 245 instruments a binary executable of program 240. In this embodiment, instrumentation tool 245 inserts code into the binary executable to output[[s]] trace information while the binary executes.

Please replace the paragraph starting on line 8 of page 23 as follows:

[0106] Cache memory manager 915 may also use[[d]] stream flow graph 920 to increase program performance. A component of cache memory manager 915 may be pre-fetcher 1010 of FIGURE 10. Pre-fetcher 1010 may use information about the relationship between hot data

streams as shown in stream flow graph 920 to pre-fetch data for use as described in more detail in conjunction with FIGURE 10.

Please replace the paragraph starting on line 19 of page 28 as follows::

At block 1225, a determination is made as to whether pre-fetching should be performed. This determination ~~made~~ may be made depending on how soon the element can be retrieved as compared to how soon it is needed. For example, element C of the hot data stream ABC may not be able to be retrieved in time for when it is needed. An element in another hot data stream, such as element F in the hot data stream FNL, that is likely to follow the hot data stream ABC may be retrievable in time for use. Alternatively, a data element may, as a matter of course, be pre-fetched immediately after whenever a data element in a dominating hot data stream preceding the data element is requested. For example, it may be determined that data elements from the hot data stream MKZ should be pre-fetched as this hot data stream is dominated (and sure to follow) the hot data stream ABC.